Objections to the Drawings

The Examiner has asserted that drawing fail to illustrate the second clutch of claim 9. The Examiner's position is respectfully traversed. The second clutch is clearly shown on Figure 2 of the specification (reference number 27) and is supported by specification (page 8, lines 1-5).

The Examiner has also asserted that the drawings fail to illustrate the bolt hole pattern and the second bolt pattern as disclosed in claim 12. Claim 12 has been amended to remove "bolt hole pattern" and "bolt pattern."

Rejections under 35 USC 112

Claim 1 has been amended to clarify the "pulley" attaches to the air conditioner compressor shaft and is selectively driven by the electric motor.

Claim 12 has been amended to clarify the "mounting plate" attaches the electric motor to the air conditioning compressor.

The Claims have been amended to provide clarity for terms utilized therein, and are believed to particularly point out and distinctly claim the applicant's invention.

Rejections under 35 USC 103

The Examiner has asserted that Claims 1, 7, 8 and 13 of the instant invention are unpatentable over Diefenthaler, Jr. in view of Wahnish and Mellum et al. The Examiner's position is respectfully traversed.

Diefenthaler teaches an auxiliary power system for an air conditioner and heater of a vehicle that includes an auxiliary engine which is selectively connected by a jack shaft assembly and an electromagnetic clutch to drive the compressor of the vehicle's air conditioner. The jack shaft assembly reduces the RPM of the auxiliary engine to an RPM suitable for operating the compressor. There is no disclosure of teaching by Diefenthaler of system which uses the auxiliary engine to drive a generator which in turn delivers electricity to an electric motor for driving the vehicle's air conditioning compressor. Moreover, Diefenthaler requires the auxiliary engine to be mounted within the engine compartment adjacent to the primary engine. Most engine compartments are not large enough to install a second engine. The instant invention is directed to mounting the auxiliary engine/generator set remote from the primary engine compartment. Still yet, Diefenthaler requires gasoline for operation of the auxiliary engine creating a higher risk of explosion. The instant invention may utilize diesel fuel thereby significantly reducing the risk of explosion.

Mellum et al. teaches an auxiliary heating and air conditioning

unit for use with a vehicle, typically a truck. The truck has a cab and a sleeper to which the auxiliary power unit provides auxiliary air conditioning and heating. The Mellum unit includes an engine having a vertically reciprocating engine and a radiator mounted internal to the enclosure. Mellum's auxiliary unit includes a complete air conditioning system in addition to the vertically reciprocating engine. Mellum makes no disclosure or suggestion of utilizing the factory installed air conditioning system. The Mellum construction requires duplicate systems and would require a considerable amount of space when compared to the instant invention, which concentrates on constructing a very compact system.

Wahnish teaches an auxiliary air conditioner drive system for use with an automobile. The system includes a gasoline engine driven generator. The generator delivers power to an electric motor that drives the engine fan in addition to the air conditioner compressor. Mounted on the compressor is a single pulley having two belt grooves. When compared to the instant invention, the single pulley necessitates an additional clutch pulley mechanism. The extra clutch is used to release the coupling between the primary engine and the fan pulley so that the electric motor can rotate the engine fan in addition to the compressor. Driving the engine fan requires a significant amount of power when compared to the requirements of the instant invention. The instant invention minimizes the number of components that are driven by the electric

motor to reduce power requirements and increase efficiency. The additional power requirements necessarily require a larger and more powerful electric motor. The larger electric motor requires additional power generation reducing the overall efficiency of the system. Moreover, Wahnish makes no disclosure or suggestion or disclosure of using a diesel fueled engine as an auxiliary power source. The Examiner has provided no motivation to combine Diefenthaler, Mellum and Wahnish as set forth in the instant rejection. None of the disclosed inventions suggest a generator set having a horizontally reciprocating engine. Diefenthaler does not utilize any type of electric motor to operate the air conditioning compressor. Mellum requires a completely separate and complete air conditioning system and Wahnish requires the electric motor to drive the cooling fan for the primary engine and an additional clutch pulley. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

The Examiner has asserted that Claims 2, 3, 11 and 14 of the instant invention are unpatentable over Diefenthaler, Jr. in view of Wahnish and Mellum et al. and further in view of Kennedy. The Examiner's position is respectfully traversed.

Kennedy the inventor of the instant invention teaches an engine

and generator set having a vertically reciprocating diesel engine. Kennedy does not disclose any type of enclosure making remote mounting on a vehicle difficult. Vehicles are often subjected to the elements in creasing the required maintenance and shortening the expected life of generator sets without enclosures. Moreover, Kennedy does not teach a horizontal reciprocating engine. One of the primary thrusts of the instant invention is its compact size. The compact size increases the versatility of the invention. In addition Kennedy does not teach or disclose combining the components necessary to operate the vehicle's air conditioning system as does the instant invention.

The Examiner has provided no motivation to combine Diefenthaler, Mellum, Wahnish and Kennedy as set forth in the instant rejection. Diefenthaler does not utilize any type of electric motor to operate the air conditioning compressor. Mellum requires a completely separate and complete air conditioning system and Wahnish requires the electric motor to drive the cooling fan for the primary engine. Kennedy makes no teaching or suggestion of and enclosure, a horizontally reciprocating engine or combining the components necessary to operate an air conditioning system with the auxiliary generator. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

The Examiner has asserted that Claim 9 of the instant invention is unpatentable over Diefenthaler, Jr. in view of Wahnish and Mellum et al. and further in view of Aoki. The Examiner's position is respectfully traversed.

Aoki teaches a device for heating the interior of an automobile. The device utilizes an air conditioning compressor to cool the incoming air to remove moisture and a viscous shear pump to generate heat to reheat the dried air prior to introduction into the automobile. Both the viscous pump and the air conditioning compressor are driven from a single belt which is driven by a small gasoline automobile engine. The solenoids are used to eliminate belt slippage in the event that both devices attempt to function at the same time. A single belt does not have the capacity to operate both devices. This situation cannot arise with the instant invention. The instant invention has a single device, i.e. the air conditioning compressor, that can be rotated by one of two separate belts powered by an engine and/or a motor. One of the belts being selectively driven by the primary truck engine and the second belt being selectively driven by the electric motor. Either of the belts are capable of driving the compressor without slip and fuel consumption may be reduced by entirely shutting down either engine.

The Examiner has provided no motivation to combine Diefenthaler, Mellum, Wahnish and Aoki et al. as set forth in the instant rejection. Diefenthaler does not utilize any type of

electric motor to operate the air conditioning compressor. Mellum requires a completely separate and complete air conditioning system and Wahnish requires the electric motor to drive the cooling fan for the primary engine. Aoki does not teach a solenoid switching device applicable to the instant invention. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited. engine and operating from the other.

The Examiner has asserted that Claims 5 and 6 of the instant invention is unpatentable over Diefenthaler, Jr. in view of Wahnish and Mellum et 'al. and Kennedy as applied to claims 1 and 3 above, and further in view of Mikami. The Examiner's position is respectfully traversed.

Mellum makes no disclosure or suggestion of removing the radiator from the enclosure to allow a more compact enclosure. In fact, Mellum's auxiliary unit includes a complete air conditioning and heating unit in addition to the vertically reciprocating engine, radiator and fan within the same enclosure.

Mikami teaches an enclosure which is divided into compartments having separate ventilation systems. The enclosure 11 is constructed to enclose the engine 13 and all of its ancillary components including the radiator 25, fan 26, fan motor 27 and

generator 24. As illustrated, the area within the enclosure 11 is divided into at least two distinct compartments. The first compartment 12 encloses the engine 13 in a manner which isolates the engine from the ancillary components. The first compartment 12 is ventilated with exhaust gas pressure from the engine 13. The exhaust gasses exiting orifice 17 cooperate with the enclosure 11 to draw air through vents 22 constructed in casing wall 11b. The second compartment encloses the ancillary components associated with the engine and utilizes the fan 26 and fan motor 27 to draw air through the radiator 25 discharging the air through vents 31. Because this device is illustrated with the radiator 25, fan 26 and fan motor 27 mounted in a separate compartment of the same enclosure it cannot be considered analogous to the instant invention. Moreover, there is no disclosure or suggestion of mounting the radiator, fan and motor in a location remote from or outside of the enclosure as is suggested in the instant invention. Still further, the Mikami device appears to be aimed at large construction type machinery where the space saving qualities of the instant invention may not be needed or appreciated. The instant invention is aimed at providing a combination low profile generator and enclosure for remotely powering the air conditioning, which can be mounted in smaller and more remote locations than would be possible with Mikami. In addition, there is no disclosure or suggestion by Mikami of utilizing an engine having one horizontal cylinder as is

suggested in the instant invention. The horizontal cylinder allows lower profiles than are possible with vertical or angled cylinders such as those illustrated in Mikami.

The Examiner has provided no motivation to combine Diefenthaler, Jr., Wahnish, Mellum, Kennedy and Mikami as set forth in the instant rejection. Since none of the disclosed inventions suggest mounting a generator set having a horizontally reciprocating diesel engine inside of an enclosure in combination with a remotely mounted radiator and/or fan for cooling the generator set. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

The Examiner has asserted that Claims 4 and 10 of the instant invention is unpatentable over Diefenthaler, Jr., Wahnish, Mellum et al. and Kennedy as applied to claims 2 and 3 above. The Examiner's position is respectfully traversed.

Kennedy the inventor of the instant invention teaches a generator support bracket for use in positioning a generator in close proximity to a horizontally oriented internal combustion engine. The support bracket replaces the engine inspection cover and allows for the direct coupling of a generator to the support bracket, and thus the engine. The direct coupling provides unit

rigidity eliminating the need for an independent baseplate and allows for the use of a timing belt without the need for belt adjustment, as commonly used in engine/generator combinations. Kennedy makes no disclosure or suggestion of any enclosure.

None of the prior art teaches or suggests using horizontally reciprocating diesel engine inside of an enclosure in combination with a remotely mounted radiator and/or fan for cooling. One of the primary thrusts of the instant invention is its compact design which allows users of the system to mount the components in a variety of places within the vehicle or along the frame of the vehicle. In addition, the compact design of the instant invention aids in vehicular aerodynamics thereby improving fuel mileage over the prior art.

The Examiner has provided no motivation to combine Diefenthaler, Jr., Wahnish, Mellum and Kennedy as set forth in the instant rejection. Since none of the disclosed inventions suggest mounting a generator set having a horizontally reciprocating engine inside of an enclosure in combination with a remotely mounted radiator and/or fan for cooling the generator set. Absent any motivation found within the prior art, it is respectfully submitted that the Examiner's combination of references can only be deemed hindsight reconstruction utilizing the instant disclosure, which is of course prohibited.

CONCLUSION

In light of the foregoing remarks, amendments to the specification and amendments to the claims, it is respectfully submitted that the Examiner will now find the claims of the application allowable. Favorable reconsideration of the application is courteously requested. Should there be any remaining issues which can be resolved via an Examiner's Amendment, the Examiner is urged to call the undersigned in order to expedite the prosecution of this application.

Respectfully submitted,

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Michael A. Slavin
Registration No. 34,016
McHale & Slavin, P.A.
2855 PGA Boulevard
Palm Beach Gardens, FL 33410
Telephone: (561) 625-6575
Telefax: (561) 625-6572
e-mail: palmbeach@mspatents.com

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